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CONTRIBUTION

Source: Austria, Czech Republic, Denmark, Estonia, the European Commission, Finland, France, Germany, Greece, GSMA, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, RIPE NCC, Romania, Slovakia, Spain, Sweden and United Kingdom Title: Next steps for proposed work on 'New IP' **Purpose:** Proposal **Contact:** Dr.-Ing. Jörg Schneider Tel: Federal Network Agency for Electricity, E-mail: Gas, Telecommunications, Post and Railways Germany

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Abstract: This contribution expresses concerns about the development of work in the ITU-T Focus Group on Technologies for Network 2030 and the New Study Proposals (NSP) Rapporteur Group. There should be no discussion or decisions on new work items or questions related to "New IP" before the publication and analysis of the ITU-T Focus Group's final report. The Internet Engineering Task Force (IETF) should lead the development of the Internet's architecture and any new work at the ITU-T related to IP should focus on specific telecommunications aspects within its expert remit.

The Internet is currently built as a distributed network using a suite of technologies developed from the 'bottom-up' to create one global Internet ("the Internet"). These technologies include a unified naming and addressing system, interoperable and backwards compatible protocols, and a flexible, modular architecture that supports 'permissionless innovation'. All this has allowed the Internet to continue to develop, grow and innovate to accommodate unforeseen growth and a variety of uses, applications and requirements. It underpins the security and resilience of the Internet to respond quickly to an ever-changing landscape and remain operational even when under heavy stress or attack.

The ITU-T Focus Group on Technologies for Network 2030 has only recently produced its final report for consideration to the parent study group, but there are already concerns about the direction its work is taking. Some of the proposals that have been made risk creating disjointed addressing systems, introducing 'single points of failure' and causing congestion on the network. There are also concerns about a lack of effective collaboration and cooperation with other Standards Development Organisations (SDOs). Some of the proposals that have been made appear to duplicate work that is taking place in other SDOs, such as the Internet Engineering Task Force's (IETF) Real-time Protocol (RTP), QUIC and the work of its Deterministic Networking working group.

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We also note broader concerns about proposals for a "New IP". These include the costs and disruption of moving to a new Internet archiecture, the burden it would place on countries and the potential this work could have to undermine efforts to deploy IPv6.

We note that despite these concerns, the NSP Rapporteur Group has already considered two proposals for new study questions related to "New IP". We believe that there should be no discussion or decisions on new study questions related to "New IP" before the publication and analysis of the ITU-T Focus Group's final report and deliverables has been published.

The Internet should continue to evolve and develop in order to meet the needs of new technologies, applications and services. That evolution should be developed in a way which is open, inclusive and multi-stakeholder and which takes into account contributions and perspectives of a range of technical, industry and other stakeholders. The Internet should continue to develop based on the organisations and structures that have allowed it to flourish so successfully.

The IETF has played the leading role in Internet architecture, although other specific Internet standards have been developed through routes such as the World Wide Web Consortium (W3C), Institute of Electrical and Electronics Engineers Standards Association (IEEE SA), and the Third Generation Partnership Project (3GPP) in order to fulfil their specific requirements. The ITU has an interest in some aspects of IP but any new work at the ITU-T should focus on telecommunications aspects within its expert remit and not a fundamental re-design of the Internet's architecture. The development of IP should be led by the IETF.

The ITU-T can play a valuable role not only by developing standards within its expert remit but also by fostering understanding of the broader environment to provide information and guidance to members, by raising awareness of internationally-recognised Internet standards developed by IETF and other SDOs and sign-posting members to other relevant organisations as appropriate.

Finally, we believe that ITU-T Study Groups should follow best practice and ensure that any study questions or new work items are based on a detailed gap analysis showing that there are standardisation gaps that merit new work, as regards to WTSA Resolution 1 paragraph 7.1.5 on the development or revision of Questions and paragraph 7.3.1 on the approval of Questions by WTSA.

Proposal

- There should be no discussion or decisions on new work items or questions related to technologies for 2030 networks (including 'New IP') before the ITU-T Focus Group's final report has been fully considered by SG11 and SG13.
- Proposals for new study questions and work items should be based on a detailed gap analysis, problems statements and use cases.
- The evolution of the Internet's architecture should be led by the IETF.
- The final report of the Focus Group should be shared with the IETF via a Liaison Statement.